REMARKS/ARGUMENTS

Claims 1 - 11 remain pending in the application. Claims 1, 6, 10 and 11 have been amended.

The amendment to the claims have been made in view of the Archer (US 5,640,423) cited and discussed in the Information Disclosure Statement filed concurrently herewith. As stated in the Information Disclosure Statement:

The Archer (US 5,640,423) patent is specific that $T_a = NT_e$ (see Fig. 1 of patent), where N is number of orthogonal signals, T_a is the symbol rate of the compressed symbol, and T_e is the effective symbol rate of conventional QAM. However, in the case of the present invention method, $T_a \neq NT_e$. To achieve spectral efficiency, with the present invention method $T_a < NT_e$. The relation $T_a = NT_e$ specific to the Archer patent implies a linear increase in the time-bandwidth product as N increases. However, in the case of the present invention, the relation is, and must be, nonlinear. Significantly, only with a nonlinearly increasing time-bandwidth product as N increases are spectral efficiency gains to

be expected. The Archer method cannot obtain superior spectral efficiency.

Respectfully submitted.

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Attachment:

Information Disclosure Statement

Form PTO-1449 (MODIFIED)

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Date: <u>December 13, 2007</u>

In the event this paper is deemed not timely filed, the applicant hereby petitions for an appropriate extension of time. The fee for this extension may be charged to Deposit Account No. 26-0090 along with any other additional fees which may be required with respect to this paper.

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

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Date: December 13, 2007